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April 10, 1992

Ms. Donna R. Searcy, Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Crescomm Transmission Services, Inc.
Petition for Rule Making; File No. RM-7912
AMH #1300

Dear Ms. Searcy:

There are submitted herewith on behalf of Crescomm Transmission Services, Inc. an original and four copies of its Comments in Support of Petition for Rule Making pending in File No. RM-7912. These Comments are submitted in response to the Public Notice dated March 11, 1991 of the filing of the Petition for Rule Making as a demonstration of Petitioner's continuing interest in the frequency allocations proposed in its Petition.

Should there be any questions about this matter, please contact the undersigned.

Respectfully submitted,

Lloyd D. Young

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ORIGINAL

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

In the Matter of	)	
	)	
AMENDMENT OF PART 80 OF THE	)	_____ Docket No. _____
THE COMMISSION'S RULES	)	File No. RM-7912
	)	
for an Allocation of Frequencies	)	
for Digital Shipboard	)	
Earth Stations	)	

To: The Commission

COMMENTS IN SUPPORT OF
PETITION FOR RULE MAKING

Crescomm Transmission Services, Inc. (herein "Crescomm"), by counsel and pursuant to Section 1.45(a) of the Commission's Rules, hereby submits these Comments in support of its Petition for Rule Making pending in File No. RM-7912. In its Petition Crescomm seeks the issuance of a new rule or rules in Part 80, Stations in the Maritime Service, under which Digital Shipboard Earth Stations[1/] would be licensed to utilize C-Band and/or Ku-Band frequencies to communicate from locations in Ocean, Sea and Coastal areas within the "foot print" of Satellite Systems, with Fixed and Temporary-Fixed Satellite Earth Stations.[2/]

[1/]Section 80.5 of the Rules defines a "ship station". The phrase "Digital Shipboard Earth Station", as used herein, means a ship station as defined in Section 80.5, which functions as a high speed digital satellite earth station (herein called "DSES").

[2/]Crescomm has also requested grant of a Pioneer Preference pursuant to Section 1.402 of the Commission's Rules for the issuance of licenses for such Digital Shipboard Earth Stations (or "DSES's") under the proposed new rules, for Ocean, Sea and Coastal areas within the "foot print" of licensed Satellite Systems. See File No. PP-34 in File No. RM-7912.

In support of the petition, the following comments are submitted.[3/]

BACKGROUND

1. Crescomm, a Utah corporation, is engaged in the business, among others, of providing domestic and international communication services by means of satellite earth stations licensed in the Domestic and International Satellite Services. These services consist of video, audio and high speed digital communications channels of various band widths operating through INTELSAT, PanAm Satellite, and other domestic and international satellite systems utilizing both C-Band and Ku-Band frequencies. Crescomm's facilities utilized for these services are operated under various FCC licenses in the Satellite Services.

2. With this background as an experienced operator of fixed and transportable satellite earth stations, Crescomm has developed a very small aperture terminal ("VSAT"), which will operate as a Digital Ship Earth Station (DSES) from a gyrostabalized platform mounted on board ship for communications via satellite with C-Band and Ku-Band Fixed and Temporary-Fixed Satellite Earth Stations. This DSES VSAT facility was initially successfully tested in a seaboard environment on board the LPH Iwo Jima on October 1987 for transmission of video, audio and digital data via Crescomm's Fixed Earth Station at Holmdel, NJ for the purpose of demonstrating that

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[3/]These Comments are a reiteration of the Petition for Rule Making Crescomm submitted on December 12, 1991, and are submitted in response to the Public Notice of the filing of the Petition, dated March 11, 1992, in order to demonstrate Crescomm's continuing interest in the frequency allocations proposed in its petition.

an at-sea commercial satellite up-link system on board a U.S. Navy ship for media pool support is feasible. During the Wood's Hole Oceanographic Institution's 1989 underwater exploration of sunken ships in the Mediterranean Sea, the DSES VSAT facility was utilized again in a test environment for live transmission of educational video programming from a ship of foreign registry on location to museums throughout the United States and Canada for viewing by over 100,000 school children.[4/] The DSES VSAT facility was subsequently successfully tested during May and June 1990 in a shipboard environment on board non-U.S. registry vessels engaged in deep sea exploration on location in the North Atlantic, for provision of full-time command, control and operational video and high speed digital data communications links between the at-sea exploration site and the operational nerve center located at Holmdel, New Jersey via Crescomm's Fixed Earth Station facility.[5/]

3. More recently the DSES VSAT facility has been tested successfully on board the M/V Dickerson Tide, a U.S. registry ship utilized by Westinghouse in support of a service being provided by the U.S. Army for benefit of the U.S. Armed Forces, U.S. Customs Service and the Drug Enforcement Agency for activities in international waters, with full-time high speed digital data communications links being provided by Crescomm via PanAm Satellite's satellite space segment and Homestead, Florida earth

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[4/]The space segment was provided by PanAm Satellite under a Temporary Authority dated November 18, 1988.

[5/]Pan Am Satellite provided the space segment under an Experimental STA (Call Sign KS2XAI).

station.[6/] Crescomm is currently providing several DSES facilities on board a number of cruise line ships of foreign registry operating in Caribbean Sea areas within the "foot print" of the PanAm Satellite domestic satellite system. These DSES VSAT facilities are being utilized to provide full-time high speed digital links between the cruise line ships and cruise line operational headquarters located in South Florida.[7/]

4. These DSES VSAT facilities are capable of communicating via other satellite systems with virtually any Fixed or Temporary-Fixed Earth Station operating on C-Band or Ku-Band. Crescomm has thus developed a commercially viable shipboard satellite earth station which can be technically and economically deployed for the provision of full-time high speed digital links in numerous kinds of ship operations in Ocean, Sea and Coastal waters.

AUTHORIZATION OF DIGITAL SHIPBOARD EARTH STATIONS UNDER PART 80 IS REQUIRED

5. Authorization of new Digital Shipboard Earth Stations under Part 80 of the Rules is required, along with an allocation of C-Band and Ku-Band frequencies for use by such earth stations on ships for communicating via Satellite Systems with satellite earth stations operating on C-Band and/or Ku-Band frequencies. Part 80 currently contains no allocation of frequencies for shipboard earth

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[6/]The shipboard station was provided by Crescomm under Experimental STA (Call Sign KS2XAJ; File No. S-0124-EX-91) and Experimental Construction Permit and License (Call Sign KI2XEE; File No. 2237-EX-PL-91). PanAm Satellite provided space segment under Experimental STA and License (Call Signs KS2XAI and KI2XET).

[7/]The space segment is currently being provided by PanAm Satellite under an Experimental License (Call Sign KG2XLZ).

station which permits communications via satellite with C-Band and/or Ku-Band earth stations. Currently all shipboard satellite earth stations must operate under the auspices of INMARSAT, irrespective of whether the land based points of communications are U.S. domestic points or foreign points.[8/]

6. However, INMARSAT's facilities and services are dedicated largely, if not entirely, to the provision of message telephone services. Tariffs on file with FCC for INMARSAT services do not include an offering which will accommodate Crescomm's or any other party's needs for full-time, uninterrupted, both way, video, audio and high speed digital data channels. While Comsat Tariff No. 102 includes some offerings of 56 kbps and 64 kbps circuits, they provide only for one way service "on a temporary and preemptible basis". The full-time, high capacity needs of Crescomm's services cannot be met by INMARSAT's tightly limited services, which will be preempted whenever INMARSAT message traffic volumes peak to existing capacity limits.

7. Moreover, INMARSAT circuits terminate at earth stations at Southbury, Connecticut and Santa Paula, California and accordingly require extensive and costly domestic landline extensions to reach Crescomm's customer locations in South Florida and elsewhere. The ability of shipboard stations to communicate with customer locations in South Florida and at other locations away from Connecticut and California by means of nearby earth stations will greatly reduce the cost of landline extensions

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[8/] See, 47 C.F.R. §80.51(b) (1989).

facilities, resulting in commensurate saving to the ultimate user of the services.[9/]

TEXT OF PROPOSED RULE

8. In its Petition, Crescomm has proposed that the text of the new rule, to be added to Part 80, be essentially as follows:

"Digital Shipboard Earth Stations.

(a) Digital Shipboard Earth Stations may be licensed for operation on board ships.

(b) Digital Shipboard Earth Stations may communicate while within the service area, or "foot print", of Satellite Systems with Fixed and Temporary-Fixed Earth Stations on the following frequencies:

Shipboard Station Transmit	Earth Station Receive
5.925- 6.425 GHz	3.700- 4.200 GHz
14.000-14.500 GHz	11.700-12.200 GHz
Receive	Transmit
3.700- 4.200 GHz	5.925- 6.425 GHz
11.700-12.200 GHz	14.000-14.500 GHz"

9. A new subparagraph (d)(5) should be added to Section 80.15, Eligibility for License, as follows: "(d)(5) Owner or operator of a ship station." This broader eligibility for licensing will permit providers of Digital Shipboard Earth Stations such as Petitioner to be the licensee of the ship stations which they utilize to provide satellite services to ship owners and

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[9/]The use of PanAm Satellite's facilities as the space segment for the experimental uses of Crescomm's DSES VSAT facilities on board ship, as described herein, have been coordinated under the notification and consultation procedures of Article XIV(c) of the INTELSAT protocols and Article 8 of the INMARSAT convention. Such procedures would, of course, be pursued with respect to any licensing procedures under the new rules proposed herein.

operators. Crescomm hereby reiterates the need for adoption of these proposed rule changes, for the following additional reasons.

THE PROPOSED RULE CHANGES WILL REGULARIZE DSES COMMUNICATIONS WITH DOMESTIC EARTH STATIONS

10. As noted above, there is no current rule in Part 80 or elsewhere in the Commission's Rules which provides for the licensing of earth stations on board ships and for the provision of communications from such ship stations via satellite to Fixed and Temporary-Fixed Satellite Earth Stations. Crescomm, nonetheless, obtained Experimental STA and, subsequently, an Experimental Construction Permit and License, which has permitted testing of its DSES VSAT facilities during the provision of communications channels for the Westinghouse service to the U.S. Armed Forces, U.S. Customs Service and Drug Enforcement Agency activities in international waters described above. Under Section 5.63 of the Rules, such experimental licenses are granted for a two year period. However, no provision is made for renewal for an additional period, except perhaps upon a showing of extraordinary need. Moreover, such licenses may be utilized only for the purposes set forth in Section 5.202 of the Rules.

11. Because of the regulatory limitations on the permitted uses of an Experimental License as well as that of a brief two year license period, Crescomm's current Experimental License provides no foundation for the continued investment in, and growth of, the provision of full-time video and high speed digital data channels to cruise lines and other ship operations having need for such services. The proposed regularization of the service, by means of

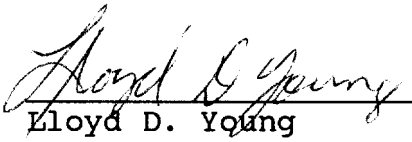
the new rules proposed herein, would provide a regulatory environment that will encourage continued investment in the development and growth of Petitioner's DSES VSAT services for ships and ship operators, and accordingly will serve the public interest.

12. With the regularization of DSES communications under the proposed new frequency allocations, DSES stations will share these frequencies with and be able to communicate with the currently licensed domestic earth stations. As a result, the isolation of ships at sea that otherwise exists from land based points of communications will be largely, if not entirely, removed.

WHEREFORE, for the reasons stated above, Crescomm Transmission Services, Inc. strongly supports the Petition for Rule Making pending in File No. RM-7912 and urges adoption of the new proposed rules described therein.

Respectfully submitted,

CRESCOMM TRANSMISSION SERVICES, INC.

By: 
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